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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
08/690,136	07/31/96	BRADY	K	96B011

- A3M1/0602 EXXON CHEMICAL COMPANY EXAMINER THURLOW, J

ART UNIT PAPER NUMBER

DATE MAILED: 06/02/97

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks





Office Action Summary

Application No. 08/690,136 ant(s)

Examiner

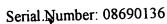
Jeffery R. Thurlow

Group Art Unit 1307

Brady et al

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Responsive to communication(s) filed on					
This action is FINAL . Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed.					
A shortened statutory period for response to this action is set to ex is longer, from the mailing date of this communication. Failure to reapplication to become abandoned. (35 U.S.C. § 133). Extensions 37 CFR 1.136(a).	pire 3 month(s), or thirty days, the				
Disposition of Claims	is/are pending in the application.				
	is/are withdrawn from consideration.				
Of the above, claim(s)	is/are allowed.				
Claim(s)	is/are rejected.				
	is/are objected to.				
☐ Claim(s)	im(s) <u>r-ro</u> is/are objected to. im(s) is/are objected to. are subject to restriction or election requirement.				
Claims	are subject to restriction of				
Application Papers See the attached Notice of Draftsperson's Patent Drawing R The drawing(s) filed on is/are objecte The proposed drawing correction, filed on The specification is objected to by the Examiner. The oath or declaration is objected to by the Examiner.	d to by the Examiner.				
Priority under 35 U.S.C. § 119 Acknowledgement is made of a claim for foreign priority under All Some* None of the CERTIFIED copies of the received. received in Application No. (Series Code/Serial Number received in this national stage application from the Interest of the received copies not received: Acknowledgement is made of a claim for domestic priority	per) nternational Bureau (PCT Rule 17.2(a)).				
Attachment(s) X Notice of References Cited, PTO-892 X Information Disclosure Statement(s), PTO-1449, Paper No Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-949 Notice of Informal Patent Application, PTO-152	(s)4				
SEE OFFICE ACTION ON T	HE FOLLOWING PAGES				

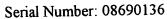


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1. The disclosure is objected to because of the following informalities: the phrase "or,or" is unclear on page 5, line 13. The words "Leon as" should read "Leonas" on page 17, line 15. The heading "Summary" should be changed to read "Summary of The Invention" on page 3, line 1.

Appropriate correction is required.

- 2. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1,5 and 8 are indefinite in the parameters of operation for the step of passing a precursor film through at least one pair of interdigitating grooved rollers. The WVTR test conditions are unclear in claims 5 and 8. Is an ASTM test being run? Polymer designations employed in the claims are unclear including "m-LLDPE", "Z-N LLDPE", "SBS" and "SIS" in claims 2-4 and 6-10. No prior antecedent is found for "the fabric barrier" in claim 8 at line 5. The phrase "sufficiently constrictive nip" is unclear in claim 8 as to stretching of the film as well as the degree of lateral stretching required. The phrase "copolymers polypropylene" should be clarified in claims 2 and 6.
 - 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
 - 4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al in view of Sheth,-073, Sneed et al and Sheth,-303. The primary reference teaches the basic steps of



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the overall process as broadly recited including passing a precursor film through at least a pair of interdigitated grooved rollers to effect the stretching and porosity of the film to provide a breathable or permeable film useful in articles requiring vapor transmission and water repellent properties. Sheth,-073 renders obvious melt embossing a precursor film from polyolefins having a high filler loading and then stretching into a breathable film having a desired water vapor transmission. A greater permeability is found in thinner areas of the embossed film after stretching according to Sheth, -073. Sneed et al is applied to show passing a film through at least one pair of interdigitating grooved rollers for imparting a balance of water vapor transmission and avoiding water strikethrough required for useful barrier films in non-wovens. Finally, Sheth,-303 renders obvious laminating breathable polyolefin films to various substrates including fabrics where the stretched, embossed film has water vapor transmission levels suggestive of those claimed herein. It would have been obvious to one with ordinary skill in the art at the time of the invention to provide a melt embossing of a precursor film and after stretch using interdigitating grooved rollers where the film may include other layers laminated thereto including non-wovens or fabrics in the process of the primary reference in view of the applied secondary references to enhance the manufacture of breathable films useful as barriers to pass water vapor while avoiding strikethrough of liquids. The specific level of WVTR being claimed is suggested by the primary reference especially as modified by the Sheth,-073 and -303 references. Please see the abstract, figures, col.3, lines 2-36, col.5, lines 46-55 and the examples and claims of the primary reference. See the abstract, col.4, lines 29-56 along with the claims of Sheth,-073. In Sneed et al, see the

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abstract, figures and claims thereof. The abstract, col.2, lines 54-65 and col.6, lines 39-60 of Sheth,-303 are applied. The selection of fillers and elastomers will be controlled by the use requirements of the final stretched film products.

- The prior art made of record and not relied upon is considered pertinent to applicant's 5. disclosure. References C-H, N and the remaining art supplied by applicants are cited of interest to show preparing of breathable films by laterally stretching precursor polyolefin film which may also be embossed. No claims are allowed.
- Any inquiry concerning this communication should be directed to J.R.Thurlow at 6. telephone number (703) 308-3828 with the FAX number being 703-305-7718 and the group receptionist number being 703-308-0651.

SHIT J.R. Thurlow

May 28, 1997

Jeffery R. Trudon **JEFFERY R. THURLOW GROUP 1300** 05/28/97